

Racing Lines

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AUSTRALASIA'S PREMIER RADIO CONTROL CAR MAGAZINE

CEN
TALON GP BUGGY

Converting the E-Zilla
to a rock crawler

Himoto Eldorada
GP Stadium Truck

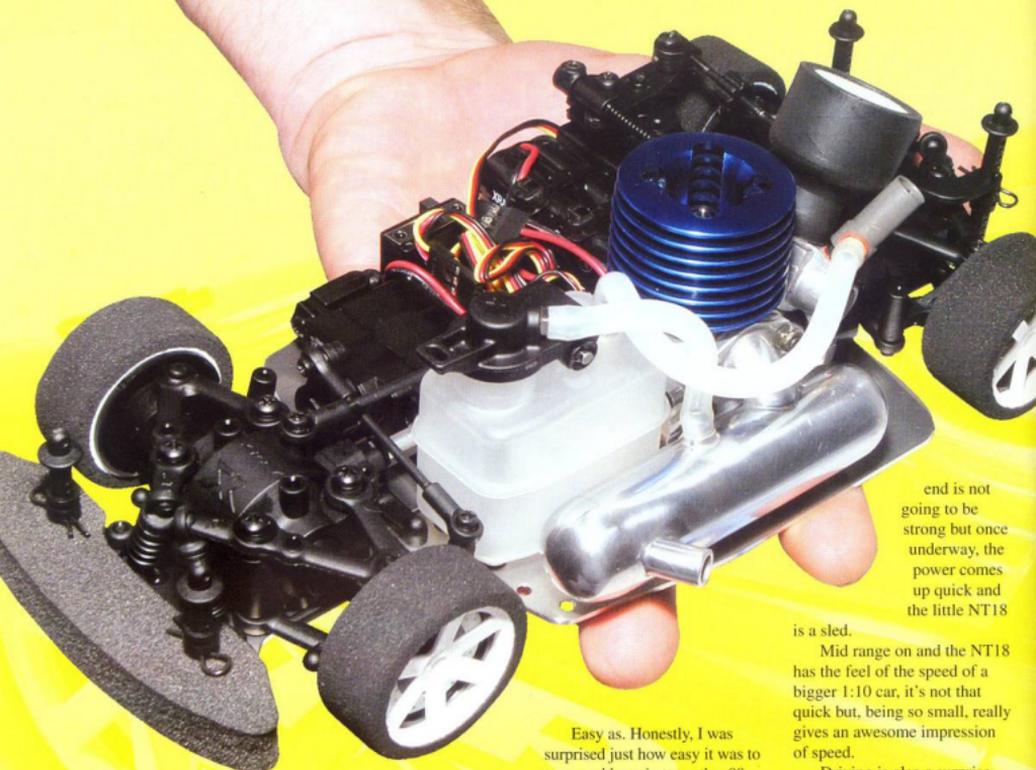
Destruction test:
Mtroniks Tempo 11



JUNE 2006

XRAY'S NITRO 1:18 ROCKET
SYDNEY TOY & HOBBY FAIR
NITRO ENGINE GUIDE, PART 3
ALL THE RACING NEWS





end is not going to be strong but once underway, the power comes up quick and the little NT18

is a sled.

Mid range on and the NT18 has the feel of the speed of a bigger 1:10 car, it's not that quick but, being so small, really gives an awesome impression of speed.

Driving is also a surprise. The little foam tires work

Easy as. Honestly, I was surprised just how easy it was to tune—and keep in tune—the .08.

The engine is a little gem.

I think it fair to say we were pleasantly shocked by its overall “user friendliness”.

Obviously the bottom

Why? A micro nitro? Why? And XRAY of all companies.

You would almost expect better!

After building and then driving the new XRAY 1:18 nitro touring car, the question changes dramatically—hey, why didn't someone come up with this sooner?

XRAY have hit on a great little concept and we are going to start at the end with the drive, because when you see how the NT18 runs, you may be interested enough to read further!

Micro Nitro Thrash

We built the little nitro kit and honestly, we fully expected the little engine to be trouble.

The rule tends to be the larger the capacity the easier it is to tune, time was going to tell.

The next reservation was how can something so small possibly be drivable with a nitro engine?

With a brushless, the M18 (basically the EP version of the NT18) went berserk, how could a nitro be better?

Ok, we were surprised big time with the NT18, on many levels.

First the run in.

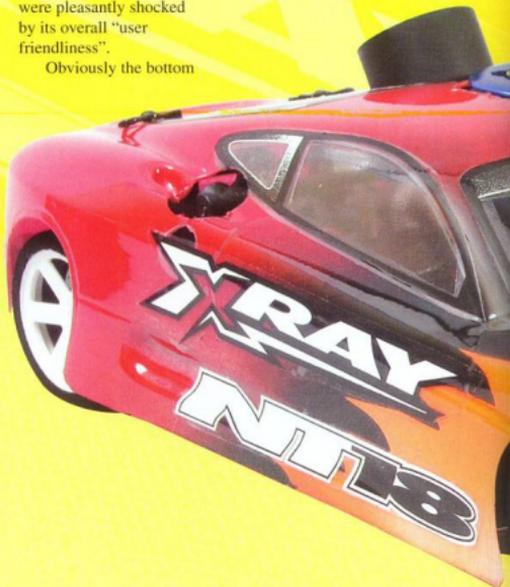
When we first saw the NT18 uses a bump start engine, we wondered whether our ever faithful Thunder Tiger starter box would do the trick.

After a bit of juggling with the big wheel, we got the little mill humming over.

The engine doesn't seem to be a “ticker”, idle is higher than you would probably expect.

Following our normal run in procedure, we set the needles to ‘rich’ and ran a few tanks through.

“What about tuning?” I hear you say.





well on a range of surfaces, although clearly they are better on asphalt.

The only caveat about surfaces is it has to be flat and smooth.

The smallest inconsistency or debris will toss the little car

It's remarkably stable and at speed, is actually easy to drive.

There is a lot of push at speed (depending a bit

brake is awesome, pulling the NT18 down from top speed to standstill as quick as the car will allow it with grip considerations.

Problems? None really.

XRAY'S MIGHTY ATOM

into the air or off track at the least.

Weight must be the secret to the stability of the NT18.

It's a lot heavier than it looks and this really helps glue down the little car.

on the surface), but come off the throttle and the front grip comes up and the NT18 darts around with a delightful responsiveness.

Some people may find the low speed directness too much but we loved it.

There is little in the way of oversteer, just plenty of stability (so long as the track is smooth).

The little steel disc

We're glad to see Hudy have released a Micro Starter Box for the NT18 and its off road trucking cousin, the NT18T, as the little car is a bit awkward on a full sized starter box.

The body is difficult to mount and if you're not careful you can pinch the fuel line, causing the car to stall.

The other other issue, beyond XRAY's control, is the running surface, it will have to be smooth and clear of debris.

We fully recommend this little car, it's a surprise package, that works.

The little engine proved easy to start, its overall performance is excellent and it proved easy to tune.

The NT18's driveability we thought for sure was going to be "impossible" but once again XRAY's superb design and manufacturing skills

The Specs

Manufacturer
XRAY

Model
NT18

Type
1:18 Nitro 4WD Touring Car

Importer
Custom Model Cars

Dimensions
LOA 240mm
Wheelbase 150mm
Track rear 104-107mm
Track front 98-101mm
Weight (RTR), dry ~542g

Technical
Chassis

Alloy 2mm main chassis, Hudy steel chassis brace, fully countersunk, composite bulkheads/diff housings.

Suspension

Inboard friction shocks, composite upper and lower arms, composite hubs, some adjustability with options.

Transmission

2 alloy shoe type clutch, single speed transmission, alloy shaft drive, gear diffs front and rear, front and rear composite universal joint drive shafts, steel disc brake, full bearings.

Engine

Supplied XRAY .08cc side exhaust bump start, slide carb, supplied all-in-one alloy header and "can" exhaust pipe, glow plug supplied.

Gear used

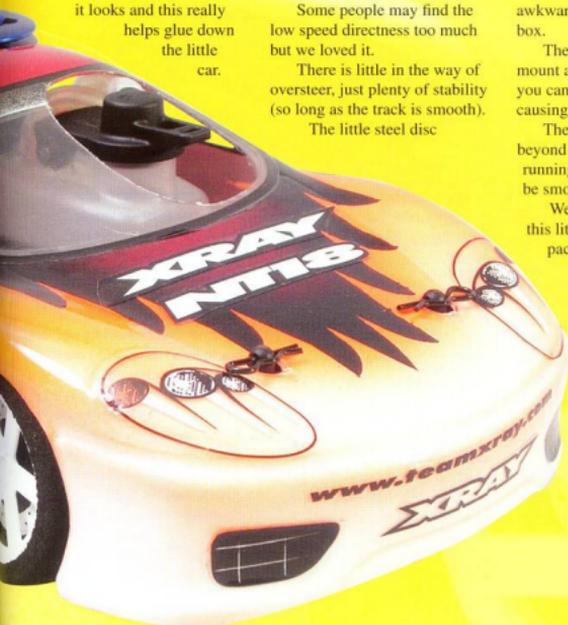
Spektrum DX3 transmitter and SR3000 receiver, supplied XRAY XMS 01-MG servos for steering and brake/throttle, supplied XRAY 4 cell 700mAh NiMH receiver battery.

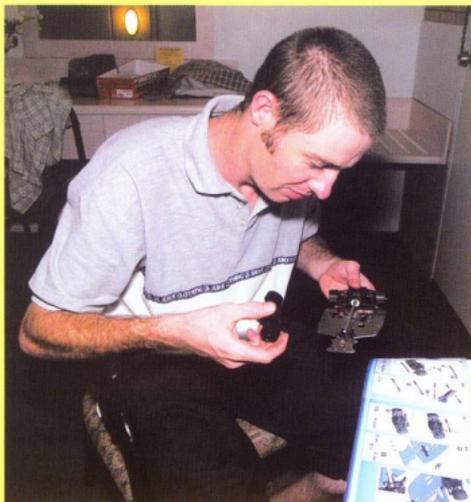
Fuel

Hot Stuff "Yellow" 15%

show through, the NT18 turning out to be the opposite to what we thought.

It's a very manageable car and in fact, very easy to drive with the sting of an impressive turn of speed.





Building the NT18

So you know how it goes, how does the build go? Easy answer—the build is the normal XRAY story.

Excellent instructions, a Hudy Profi screwdriver helping you on your way.

XRAY is a quality outfit and it shows equally in the NT18 as it does in every other XRAY kit we have had the pleasure of building.



Everything fits and the parts are quality components.

The build of the Racing Lines NT18 was undertaken by a pair of Racing Lines writers, so while one was building the front bulkhead the other was building the rear.

The result? The NT18 was a rolling chassis in about two hours.

Set aside about three to four hours to have a relaxed build of the NT18.

After the chassis build, some more time will be needed to get the body finished.

Assembly is logical, front and rear bulkheads with suspension components are built then assembled on the chassis.

The shocks and engine follow suit and finally the radio tray, which removes as a whole unit with the removal of four screws.

Incidentally, while our NT18 was supplied with all radio gear (two micro servos and a receiver battery pack), the NT18 is available without radio gear if desired.

It's not a complex build task and a novice should feel pretty confident completing the NT18 to a high standard.

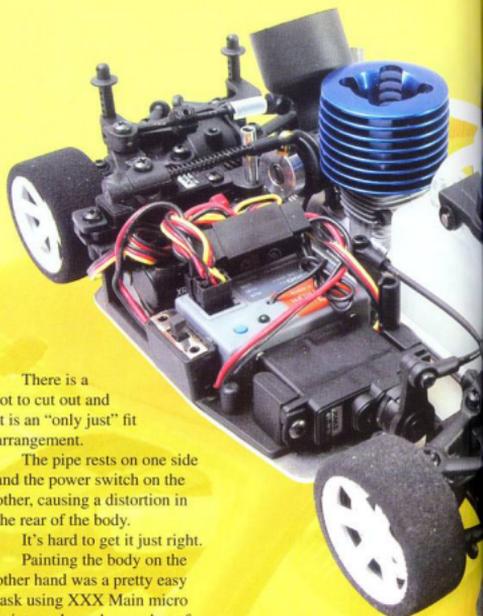
Fitting the body requires a bit of work.

There is a lot to cut out and it is an "only just" fit arrangement.

The pipe rests on one side and the power switch on the other, causing a distortion in the rear of the body.

It's hard to get it just right. Painting the body on the other hand was a pretty easy task using XXX Main micro paint masks and a number of Tamiya spray packs.

It would be easier to get a top paint job with an



Power leaves the little engine through a twin shoe alloy clutch and Hudy steel clutch bell.

The spur gear mounts on the alloy centre driveshaft, the precision ground steel disc brake and Ferodo brake shoes are also mounted next to the spur.

Composite bulkheads at the front and rear of the car house bevel gear diffs and also serve as mounting points for the suspension.

The chassis underpinning the NT18 is countersunk 2mm alloy.

Like many of the new XRAY models, the NT18 chassis can be tuned for the

air brush rather than spray packs but, try as I do, I can't convince the editor air brush equipment is needed.

Power house

At the heart of the NT18 lies a little 0.8cc side exhaust slide carb engine.

It is teamed with an alloy can type muffler to expel the burnt mixture.

What is amazing is the little engine takes a standard glow plug.

Amazing that it fits in the anodised cooling head!



amount of flex the chassis develops.

The chassis features cutouts for starter box access, cooling for the engine and for the cable ties that hold the receiver battery in place.

Suspension is fully independent.

To achieve full movement, XRAY employ composite uni joint drive shafts on all four corners, also triangulated composite wishbone suspension arms for upper and lower location of the hubs.

Fixed links set the toe angle for the common front to rear hub carriers.

Friction shocks for each corner are complemented with coil over shocks.

The shocks are mounted inbound and have a couple of mounting positions.

While they are not supplied, set screws can be fitted for the option of adjusting droop, we went this way.

The electronics came with our kit, that's two micro servos and a four cell receiver/servo battery.

All these items load onto a separate quickly removable radio tray.

We fitted the Spectrum receiver between the steering servo and receiver battery.

The supplied switch is meant to be screwed to the radio tray but even with the smallest Spectrum receiver, the switch needed to be attached to servo tape.

XRAY have certainly raided the M18 parts bin for the NT18, many of the electric car's parts will fit the nitro machine.

This does not detract from the NT18 at all as it's tough and well constructed.

Fuel comes out of a tiny 30cc tank with a stone filter, whilst out the front is a foam bumper.

Finally, ensuring smooth running, the kit is supplied with a full set of bearings.



XRAY power the NT18 with this tiny .08 side exhaust, bump start, slide carb powerplant that delivers an enormous amount of grunt given its size. Alongside it is the .30 from OS, itself quite a rocket.

Our thoughts

XRAY have done it again. This little car is a big surprise package.

Our initial response, "why?" was soon replaced by "why not, especially when it can be done so well by someone like XRAY."

XRAY have once again demonstrated their innovative, almost left field, talent, creating a very well executed R/C nitro touring car—regardless of its size.

It's remarkable how well the NT18 drives.

Yes, it is relatively quick but it's also very manageable.

We're sure a novice could

build and drive the NT18 but the more experienced driver will probably have a better understanding of how (and where) to get the most out of the NT18.

Certainly this is a serious kit and, despite the size, is rewarding to build and drive.

XRAY experienced unprecedented worldwide demand for the NT18, their first production run an absolute sell out within days.

It will now be interesting to see if this scale becomes a popular racing class.

Nevertheless, the NT18 is bound to become an "option" for many, it is a lot of pint sized fun at high speed!

Our thanks

Thanks to XRAY for the review NT18, they are available from local hobby shops nationally along with the other XRAY products.

Custom Model Cars are XRAY'S

Australian agents so ask your local hobby shop to contact them for more information.

